1. Alignment and Adjustments

1-1 Instruction

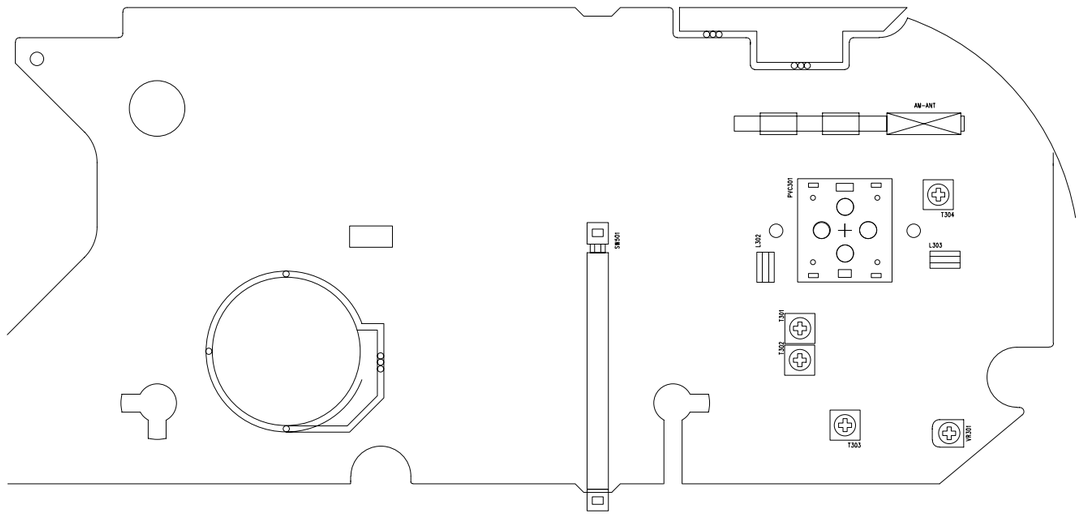

Fig 1-1 Location of Adjustment Point

1-1-1 Test Equipment

1. AM/FM Standard Signal Generator (S.S.G)
   -AM : 1KHz,30% MOD -FM : 1KHz,40KHz(Deviation)
2. Oscilloscope
3. VTVM
4. Frequency counter
5. Loop antenna
6. Dummy load (4 Ω)
7. DC voltmeter
8. SW Dummy ANT
9. FM Stereo Modulator
10. FM/AM IF Generator : 10.7MHz,455KHz

1-1-2 Pre-Adjustment

1. Check the source voltage
2. Select desired Band and Function.
3. Set the SBS control to off position.
4. Set volume control to approximaterly 50mW(4ohm)

1-2 Tuner Section

1-2-1 FM Adjustment

Step	Item	Connection	SSG.FREQ.	FREQ. Setting	Adjust. Point	Remark
1	Intermediate frequency (IF) adjustment	Fig 1-2	10.7 MHz	Tune to the lowest	FM IFT : T301 T303	Maximum output
2	FM frequency coverage adjustment	Fig 1-3	87.5 MHz	Tune to the lowest	FM OSC COIL : L303	Best resonating point of SSG
3			108.5 MHz	Tune to the highest	OSC TRIMMER : V4	Best resonating point of SSG
4	FM tracking adjustment	Fig 1-3	90 MHz	90 MHz	L302	Maximum output
5			106 MHz	106 MHz	ANT TRIMMER : V2	Maximum output
6	Stereo separation adjustment	Fig 1-3 Connect Stereo generatorto S.S.G additionally	98 MHz	98 MHz	VR301	

AM FM IF OUTPUT : PIN NO. 19 of IC301(KA22900) - Freference next page(Fig 1-2)

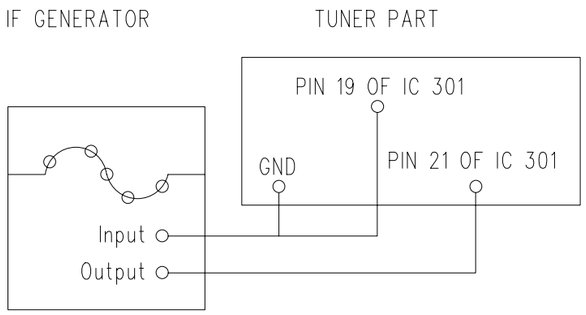

Fig 1-2

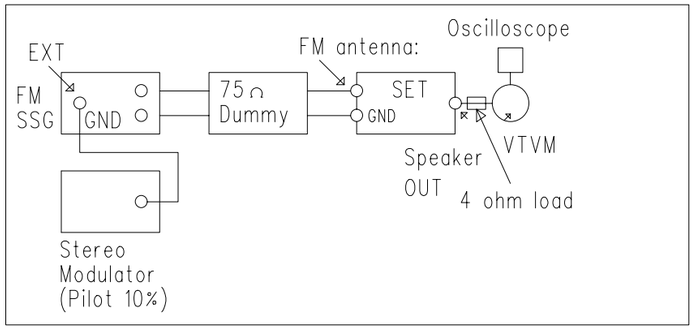

Fig 1-3

1-2-2 AM Adjustment(2BAND)

Step	Item	Connection	SSG.FREQ.	FREQ. Setting	Adjust. Point	Remark
1	Intermediate frequency (IF) adjustment	Fig 1-4	455 KHz (465) KHz	Tune to the lowest	AM IFT : T302	Maximum output
2	AM frequency coverage adjustment	Fig 1-5	525 KHz	Tune to the lowest	AM OSC COIL : T304	Best resonating point of SSG
3			1650 KHz (1750) KHz	Tune to the highest	OSC TRIMMER : V3	Best resonating point of SSG
4	AM tracking adjustment	Fig 1-5	600 KHz	600 KHz	AM ANT COIL	Maximum output
5			1400 KHz	1400 KHz	ANT TRIMMER : V1	Maximum output

AM IF OUTPUT : PIN NO. 19 of IC301(KA2290)

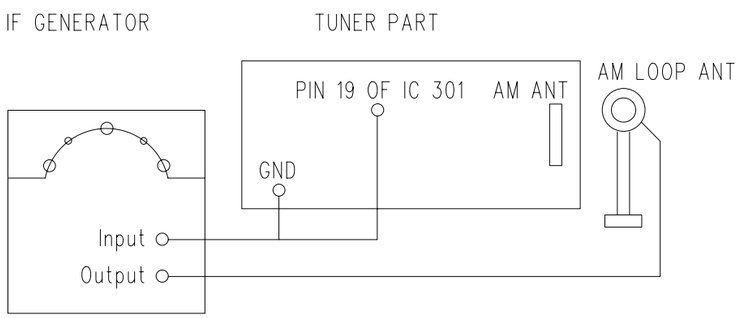

Fig 1-4

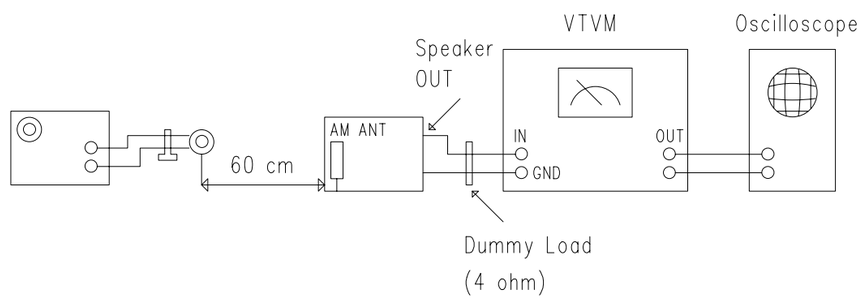

Fig 1-5

1-3. Deck Section

1-3-1. Recording BIAS adjustment

1) Connent frequency counter C703 (See Fig.1-8) and press the Record button.

2) frequency counter reads 80KHz

1-3-2. Tape AZIMUTH adjustment

1) Connect the equipments as per Fig.1-10 to adjust the tape azimuth with test tape (recorded at 6.3KHz : MTT-113N)

2) Play the test tape after inserting in DECK.

3) Adjust the azimuth adjustment screw of left side of record/play head for maximum output and for the same channel phase.(see Fig.1-9)

1-3-3. Tape speed adjustment

1) Connect the equipments as shown in Fig.1-10 adjust the tape speed with test tape (recorded at 3KHz : MTT-111N)

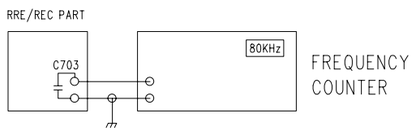

Fig.1-8 Recording bias adjustment

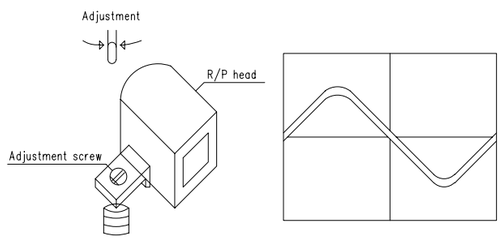

Fig.1-9 Azimuth speed adjustment

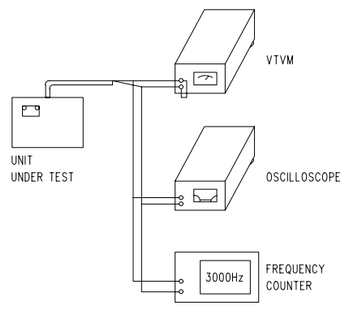

Fig.1-10